MINI PROJECT

REPORT ON

EMPLOYEE PAYROLL SYSTEM

Submitted By

Elisha Chakranarayan

Siddesh Kulkarni

Shruti Patole

Tejal Kumbhar

Ashwini Sakhare

Under the Guidance of

Prof. Shreya Shenai

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: INTRODUCTION

Employee Payroll System is computer-operated system designed to record monitor and manage employees' payroll matter in any organization With an increase in the number of employees and organizations, the financial management of the organization is becoming a complex issue. Also, there is a great deal of strain on top management in the Organization.

The proposed project "Employee Payroll System" has been developed to overcome the problems faced in the practice of manual systems. This software is built to eliminate and in some cases reduce the hardships faced by the existing system. Moreover, this system is designed for a particular need of the company to carry out its operations smoothly and effectively. It is user-friendly as no formal knowledge is required to use the system. Human resource challenges are faced by every organization which has to be overcome by the organization. Every organization has different employee and payroll management needs. Therefore this design will provide an exclusive Employee Payroll System that can be adapted for the organization's Managerial Requirements.

Existing System and Need for System

The purpose of the project is to build an application to reduce the manual work for managing and generating the employee records and we will follow to achieve these objectives in this project. The administrator has the rights to enter or modify the records.

IDENTIFICATION OF NEED :

- It is time saving.
- It reduces human error.
- Always up-to-date with taxes.
- It is secure.
- Easy Integration.

Scope of Work

The payroll management system is a set of processes that helps you streamline salaries, bonuses, deductions, taxes, and other necessary aspects of the net pay of all the employees in your organization.

There are two primary objectives of the payroll management system in India. One is the macro objective, which is related to sales, strategy, revenue, etc. Another is micro, which is associated with the daily tasks of the business.

The aim behind having a payroll management system is to automate and streamline micro tasks such that the HR team has time to focus on the macro tasks.

You don’t have to worry about handling, managing, and creating payslips, salaries, and deductions of the employees

Operating Environment – Hardware and Software

HARDWARE REQUIREMENTS :

- ✓ Desktop PC or a Laptop
- ✓ Printer
- ✓ Operating System – Windows 10
- ✓ Intel® CoreTM i3-6006U CPU @ 2.00GHz
- ✓ 4.00 GB RAM
- ✓ 64-bit operating system, x64 based processor
- ✓ 1024 x 768 monitor resolution
- ✓ Keyboard and Mouse

SOFTWARE REQUIREMENTS :

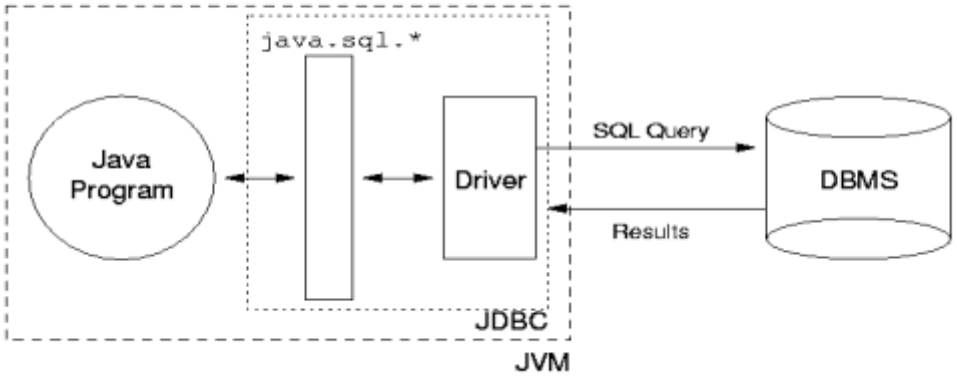
- ✓ Operating System : Windows 10
- ✓ Front-end : Java NetBeans
- ✓ Back-end : SQLite

Detail Description of Technology Used

1. **JAVA:**

Java is a general-purpose, object-oriented programming language developed by Sun Microsystems of USA in 1991.Originally called Oak by James Gosling (one of the inventor of the language). Java was invented for the development of software for cunsumer electronic devices like TVs, tosters, etc. The main aim had to make java simple, portable and reliable. Java Authors: James , Arthur Van , and others. Java is a high-level, third generation programming language, like C, FORTRAN, Smalltalk, Perl, and many others. You can use Java to write computer applications that play games, store data or do any of the thousands of other things computer software can do. Compared to other programming languages, Java is most similar to C. However although Java shares much of C's syntax, it is not C. Knowing how to program in C or, better yet, C++, will certainly help you to learn Java more quickly, but you don't need to know C to learn Java. A Java compiler won't compile C code, and most large C programs need to be changed substantially before they can become Java programs. What's most special about Java in relation to other programming languages is that it lets you write special programs called applets ,web project etc. that can be downloaded from the Internet and played safely within a web browser. Java language is called as an Object-Oriented Programming language and before beginning for Java, we have to learn the concept of OOPs(Object-Oriented Programming).

JDBC DRIVER MODEL



In the commercial world, we use Java 2 Enterprise Edition (J2EE) to solve business problems, to develop commercial software, or to provide contract services to other businesses' projects. If a company wants to build an e-business Website using a multitier architecture, it usually involves managers, architects, designers, programmers, testers, and database experts throughout the development lifecycle

2. Introduction to Tomcat web server :

Tomcat is an open source web server developed by Apache Group. Apache Tomcat is the servlet container that is used in the official Reference Implementation for the Java Servlet and Java Server Pages technologies. The Java Servlet and Java Server Pages specifications are developed by Sun under the Java Community Process. Web Servers like Apache Tomcat support only web components while an application server supports web components as well as business components (BEAs Web logic, is one of the popular application server).To develop a web application with jsp/servlet install any web server like JRun, Tomcat etc to run your application.

3. Mapping :

Mapping Java classes to database tables is accomplished through the configuration of an XML file or by using Java Annotations. When using an XML file, Hibernate can generate skeletal source code for the persistence classes. This is unnecessary when annotations are used. Hibernate can use the XML file or the annotations to maintain the database schema. Facilities to arrange one-to-many and many-to-many relationships between classes are provided. In addition to managing associations between objects, Hibernate can also manage reflexive associations where an object has a one-to-many relationship with other instances of its own type.

4. SQLite :

SQLite is an in-process library that implements a self-contained, serverless, zero-configuration, transactional SQL database engine. The code for SQLite is in the public domain and is thus free for use for any purpose, commercial or private. SQLite is the most widely deployed database in the world with more applications than we can count, including several high-profile projects.

SQLite is an embedded SQL database engine. Unlike most other SQL databases, SQLite does not have a separate server process. SQLite reads and writes directly to ordinary disk files. A complete SQL database with multiple tables, indices, triggers, and views, is contained in a single disk file. The database file format is cross-platform - you can freely copy a database between 32-bit and 64-bit systems or between big-endian and little-endian architectures. These features make SQLite a popular choice as an Application File Format. SQLite database files are a recommended storage format by the US Library of Congress. Think of SQLite not as a replacement for Oracle but as a replacement for fopen()

SQLite is a compact library. With all features enabled, the library size can be less than 750KiB, depending on the target platform and compiler optimization settings. (64-bit code is larger. And some compiler optimizations such as aggressive function in lining and loop unrolling can cause the object code to be much larger.) There is a trade off between memory usage and speed. SQLite generally runs faster the more memory you give it. Nevertheless, performance is usually quite good even in low-memory environments. Depending on how it is used, SQLite can be faster than direct file system I/O.

SQLite is very carefully tested prior to every release and has a reputation for being very reliable. Most of the SQLite source code is devoted purely to testing and verification. An automated test suite runs millions and millions of test cases involving hundreds of millions of individual SQL statements and achieves 100% branch test coverage. SQLite responds gracefully to memory allocation failures and disk I/O errors. Transactions are ACID even if interrupted by system crashes or power failures. All of this is verified by the automated tests using special test harnesses which simulate system failures. Of course, even with all this testing, there are still bugs. But unlike some similar projects (especially commercial competitors) SQLite is open and honest about all bugs and provides bugs lists and minute-by-minute chronologies of code changes.

The SQLite code base is supported by an international team of developers who work on SQLite full-time. The developers continue to expand the capabilities of SQLite and enhance its reliability and performance while maintaining backwards compatibility with the published interface spec, SQL syntax, and database file format. The source code is absolutely free to anybody who wants it, but professional support is also available.

The SQLite project was started on 2000-05-09. The future is always hard to predict, but the intent of the developers is to support SQLite through the year 2050. Design decisions are made with that objective in mind.

We the developers hope that you find SQLite useful and we entreat you to use it well: to make good and beautiful products that are fast, reliable, and simple to use. Seek forgiveness for yourself as you forgive others. And just as you have received SQLite for free, so also freely give, paying the debt forward.

2 : PROPOSED SYSTEM

- ✓ In the proposed system all the parameter are considered to maintain neat and easier
- ✓ records and solutions.
- ✓ Stores the information of the employees, which includes personal data, contact information, leaves, overtime, etc.
- ✓ The system demands input from the admins and appropriately processes the data, which provides maximum benefits at minimum price.
- ✓ Generates the salary on monthly basis.
- ✓ Employee first has to register himself to fill quotation details.
- ✓ Admin has to maintain the records based on which the salary is calculated.
- ✓ Admin is responsible for all the information stored in system and it's accuracy.
- ✓ Admin prepare reports.

Objectives of System

To automate and streamline micro tasks like recording salaries, bonuses, deductions, taxes, and other necessary aspects such that the HR team has time to focus on the macro tasks.

The main objective of the payroll management system is to provide an easy way to automate all the functionalities. It manages the details of the employees, calculates their salary, marks attendance. It will manage all the details of the employees and payments. The project is totally built at an administrative end and thus only the administrator is guaranteed access to the system. The purpose of this project is to reduce manual work.

2.3 : User Requirements

2.3.1 : Functional Requirements

• In software engineering, a functional requirement defines a function of a software system or its component.

• A function is described as a set of inputs, the behavior, and outputs

• Functional requirements may be calculations, technical details, data manipulation and processing and other specific functionality that define what a system is supposed to accomplish. Behavioural requirements describing all the cases where the system uses the functional requirements are captured in use cases

• Functional requirements are supported by non-functional requirements (also known as quality requirements), which impose constraints on the design or implementation (such as performance requirements, security, or reliability).

• Generally, functional requirements are expressed in the form "system must do <requirement>", while non-functional requirements are "system shall be <requirement>". The plan for implementing functional requirements is detailed in the system design. The plan for implementing non-functional requirements is detailed in the system architecture.

• As defined in requirements engineering, functional requirements specify particular results of a system. This should be contrasted with non-functional requirements which specify overall characteristics such as cost and reliability. Functional requirements drive the application architecture of a system, while non-functional requirements drive the technical architecture of a system.

2.3.2 Non Functional Requirements

➢ **Product Requirements**

❖ **Usability requirements**

Usability is the ease of use and learns ability of a human-made object. The object of use can be a software application, website, book, tool, machine, process, or anything a human interacts with. A usability study may be conducted as a primary job function by a usability analyst or as a secondary job function by designers, technical writers, marketing personnel, and others. Usability includes methods of measuring usability, such as needs analysis and the study of the principles behind an object's perceived efficiency or elegance. In human-computer interaction and computer science, usability studies the elegance and clarity with which the interaction with a computer program or a web site (web usability) is designed. Usability differs from user satisfaction and user experience because usability also considers usefulness.

❖ **Reliability requirements**

Reliability deals with the study, evaluation, and life-cycle management of reliability: the ability of a system or component to perform its required functions under stated conditions for a specified period of time. Reliability engineering is a sub-discipline within systems engineering. Reliability is theoretically defined as the probability of failure, the frequency of failures, or in terms of availability, a probability derived from reliability and maintainability. Maintainability and maintenance may be defined as a part of reliability engineering. Reliability plays a key role in cost-effectiveness of systems.

❖ **Portability requirements**

Portability in high-level computer programming is the usability of the same software in different environments. The prerequirement for portability is the generalized abstraction between the application logic and system interfaces. When software with the same functionality is produced for several computing platforms, portability is the key issue for development cost reduction.

Transferring installed program files to another computer of basically the same architecture.

Reinstalling a program from distribution files on another computer of basically the same architecture.

❖ **Efficiency requirements**

Resource consumption for given load describes efficiency of product and web site.

❖ **Performance requirements**

Performance metrics include availability, response time, channel capacity, latency, completion time, service time, bandwidth, throughput, relative efficiency, scalability, performance per watt, compression ratio, instruction path length and speed up.

• Short response time for a given piece of work

• High throughput (rate of processing work)

• Low utilization of computing resource(s)

• High availability of the computing system or application

• Fast (or highly compact) data compression and decompression

• High bandwidth / short data transmission time

➢ **Organisational Requirements**

❖ **Delivery requirements**

Delivery requirements include details of delivery of product on time and as per client requirements. The products should be delivered on prescribed standard.

❖ **Implementation requirements**

Implementation is the realization of an application, or execution of a plan, idea, model, design, specification, standard, algorithm, or policy.

an implementation is a realization of a technical specification or algorithm as a program, software component, or other computer system through programming and deployment. Many implementations may exist for a given specification or standard.

For example, web browsers contain implementations of World Wide Web Consortium-recommended specifications, and software development tools contain implementations

of programming languages.

❖ **Standard requirements**

The project should be developed as per standard format specified by IEEE.

Typical platforms include a computer architecture, operating system, programming languages and related user interface. The product should be developed as per client's standard requirements.

➢ **External Requirements**

❖ **Interoperability requirements**

Interoperability is a property of a product or system, whose interfaces are completely understood, to work with other products or systems, present or future, without any restricted access or implementation.

The IEEE Glossary defines interoperability as:

the ability of two or more systems or components to exchange information and to use the information that has been exchanged

❖ **Legislative requirements**

In the proprietary software industry, an end-user license agreement or software license agreement is the contract between the licensor and purchaser, establishing the purchaser's right to use the software. The license may define ways under which the copy can be used.Software companies often make special agreements with large businesses and government entities that include support contracts and specially drafted warranties.

❖ **Privacy requirements**

The term "privacy" means many things in different contexts. Different people, cultures, and nations have a wide variety of expectations about how much privacy a person is entitled to or what constitutes an invasion of privacy.

Privacy is the ability of an individual or group to seclude themselves or information about themselves and thereby reveal themselves selectively. The boundaries and content of what is considered private differ among cultures and individuals, but

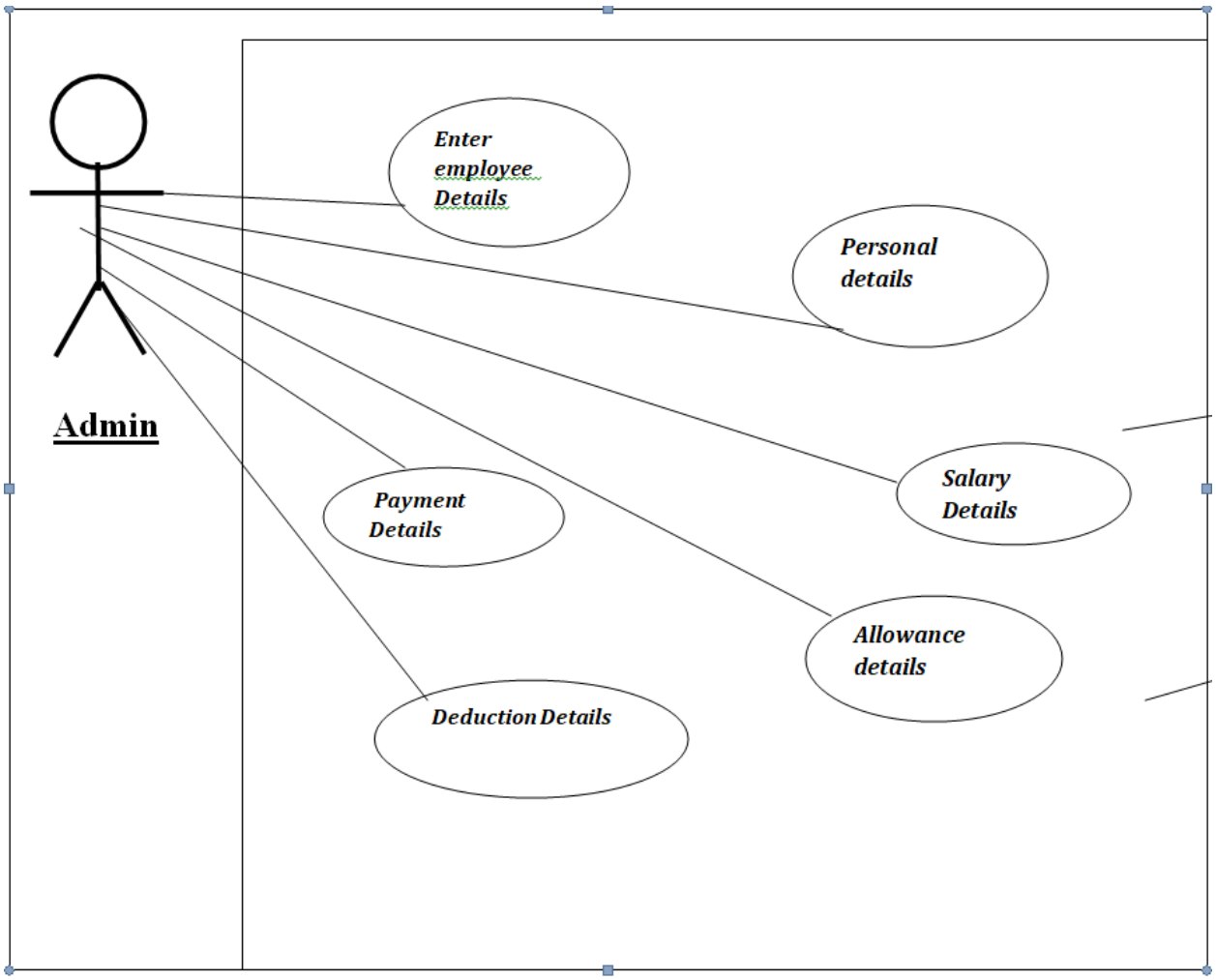
share basic common themes. Privacy is sometimes related to anonymity, the wish to remain unnoticed or unidentified in the public realm.

❖ **Safety requirements**

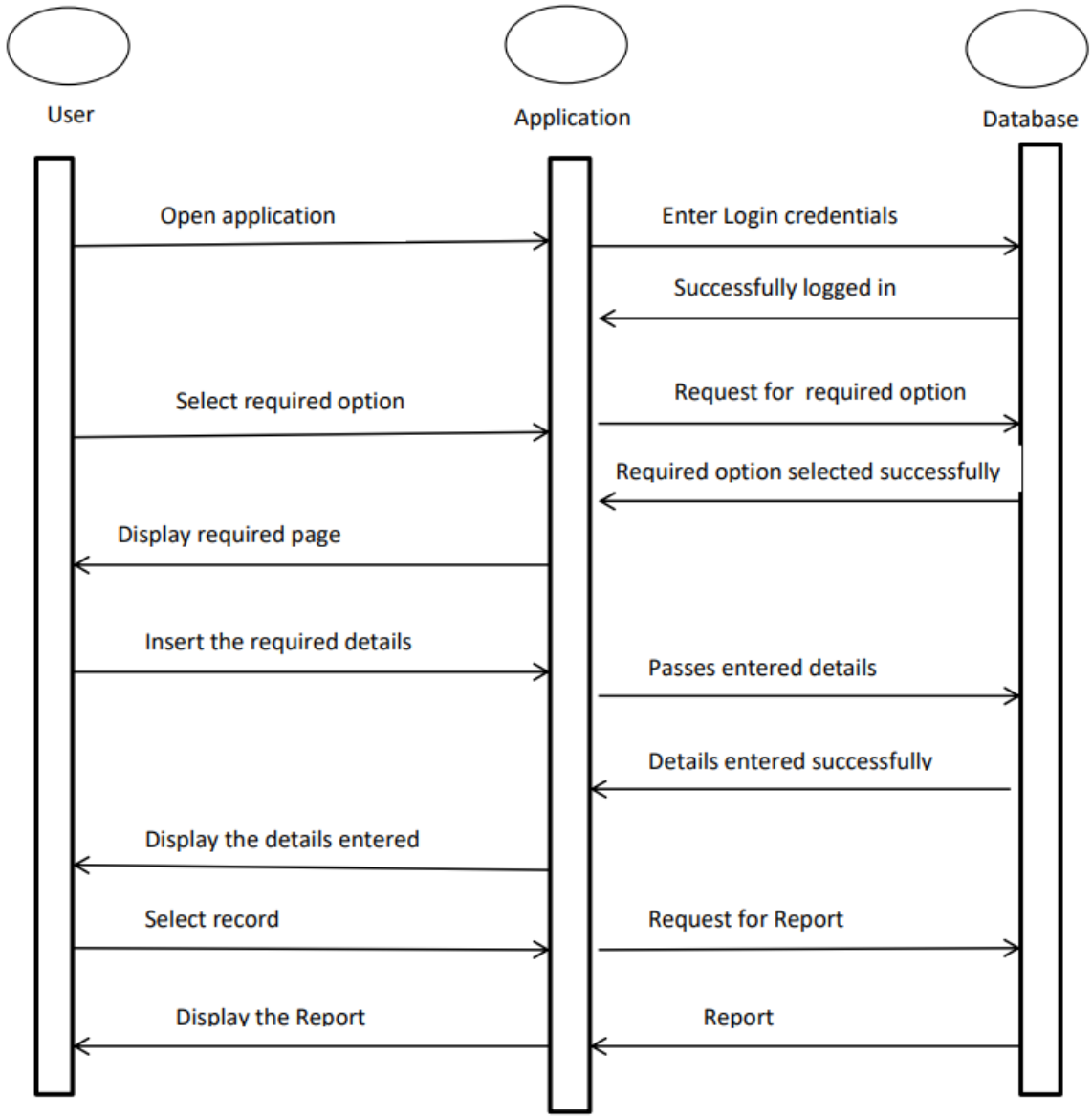
Safety can also be defined to be the control of recognized hazards to achieve an acceptable level of risk. Safety is the state of being "safe", the condition of being protected against physical, social, spiritual, financial, political, emotional, occupational, psychological, educational or other types or consequences of failure, damage, error, accidents, harm or any other event which could be considered nondesirable.

3: ANALYSIS & DESIGN

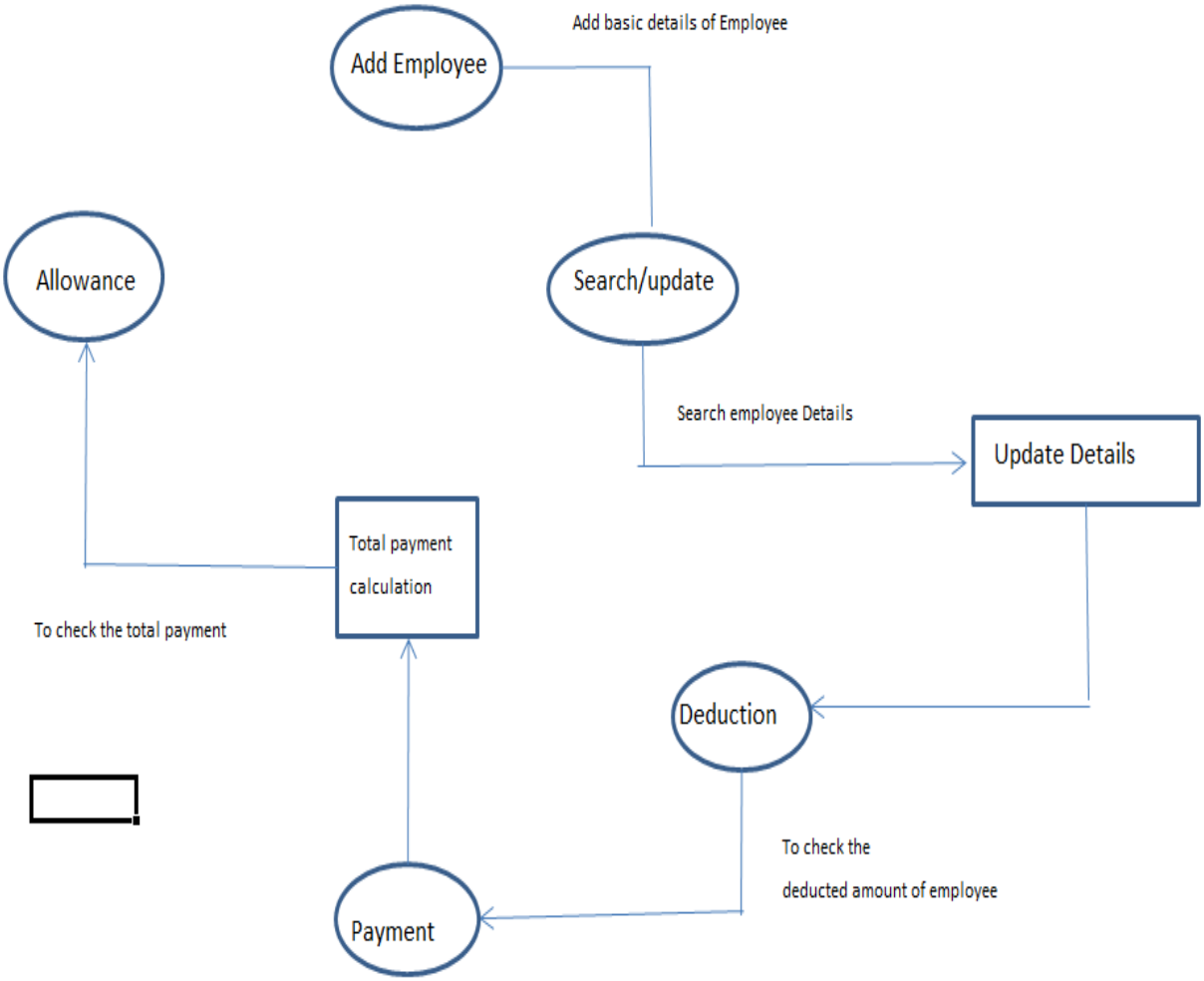
3.1 Use Case Diagram



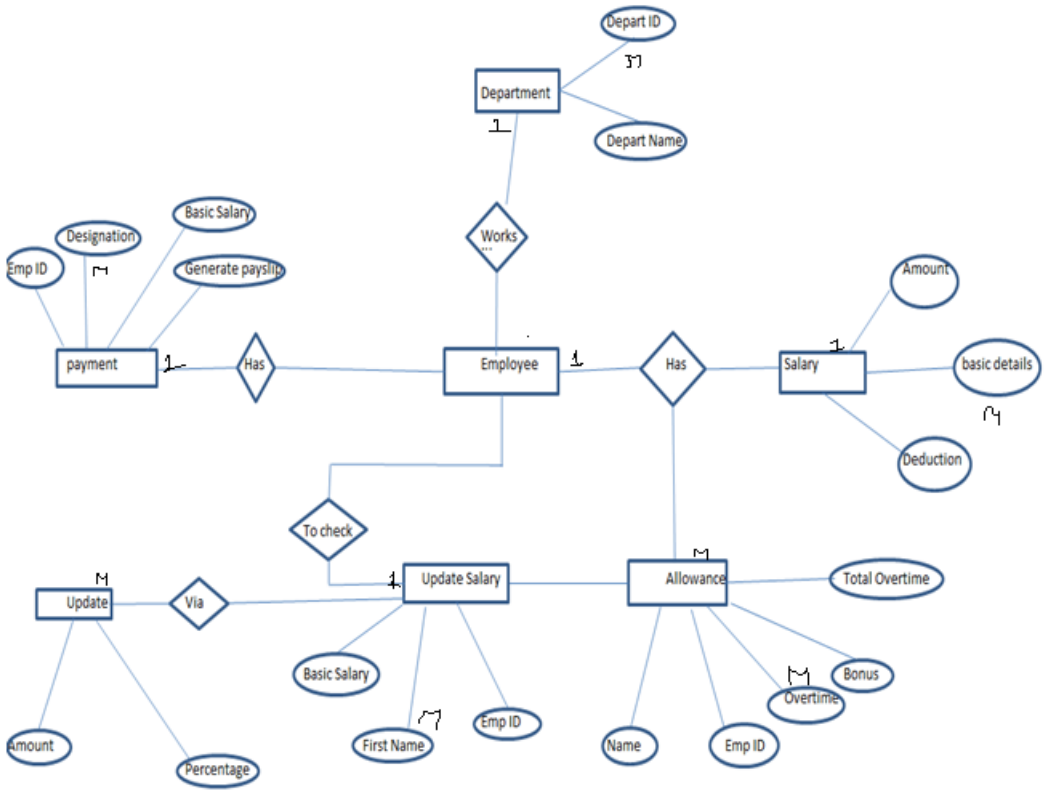
3.2 : Sequence Diagram



3.3 : Data Flow Diagram



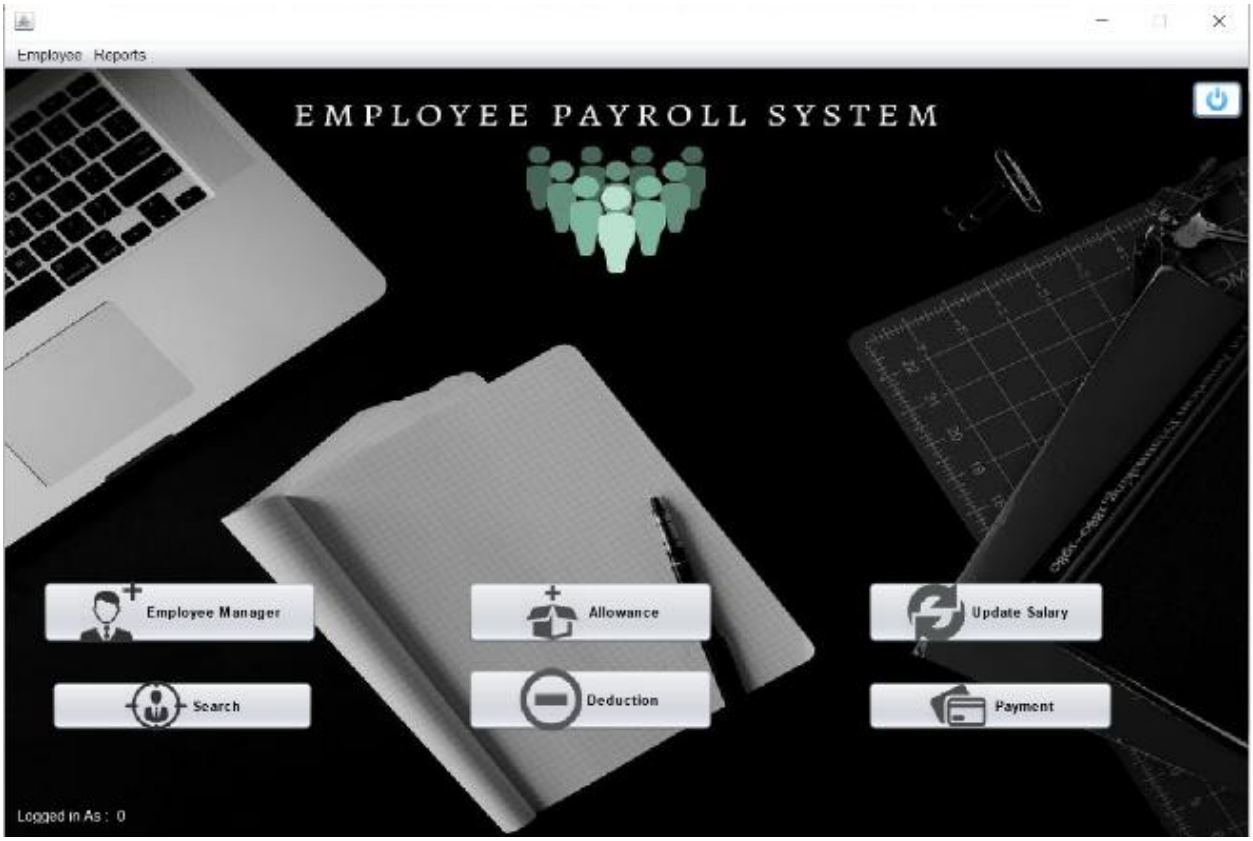
3.4 : ER Diagram



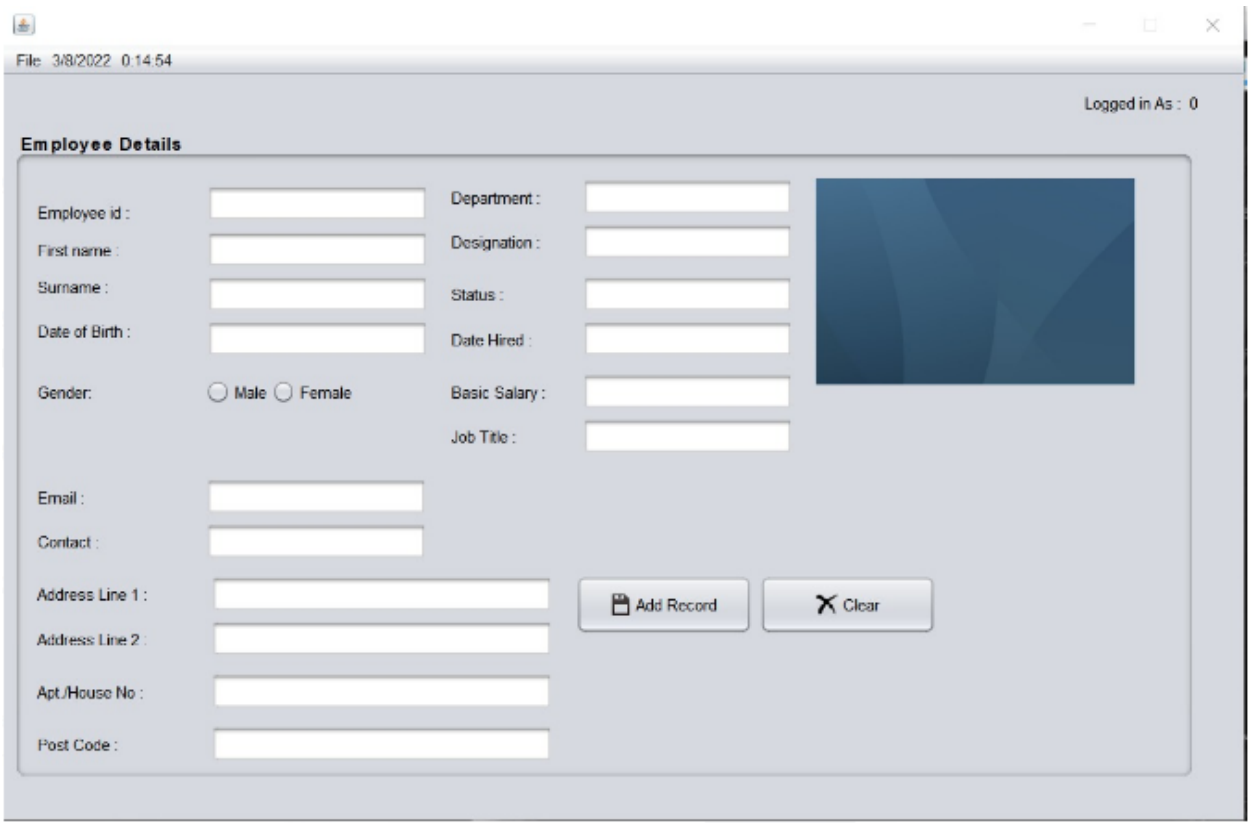
3.5 : User Interface Designs

Login Page

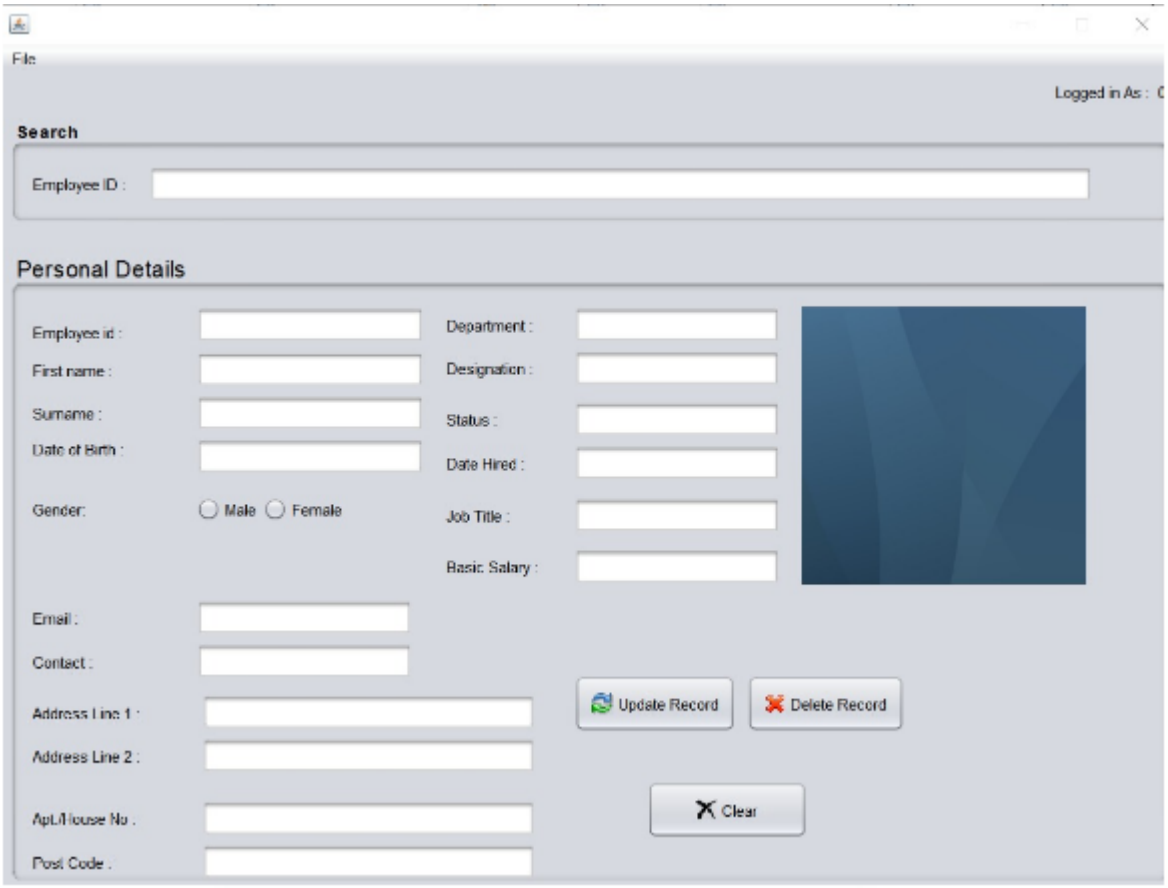
Main Menu


Employee Reports
EMPLOYEE PAYROLL SYSTEM
Employee Manager
Allowance
Update Salary
Search
Deduction
Payment
Logged in As : 0

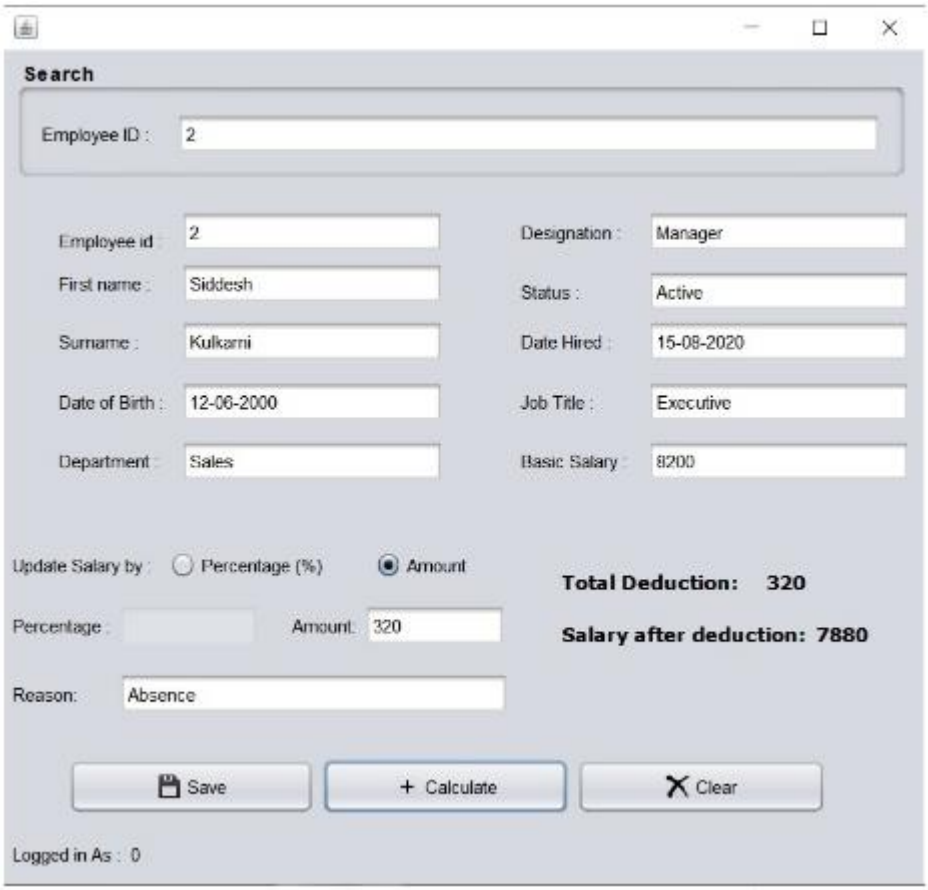
Add Employee



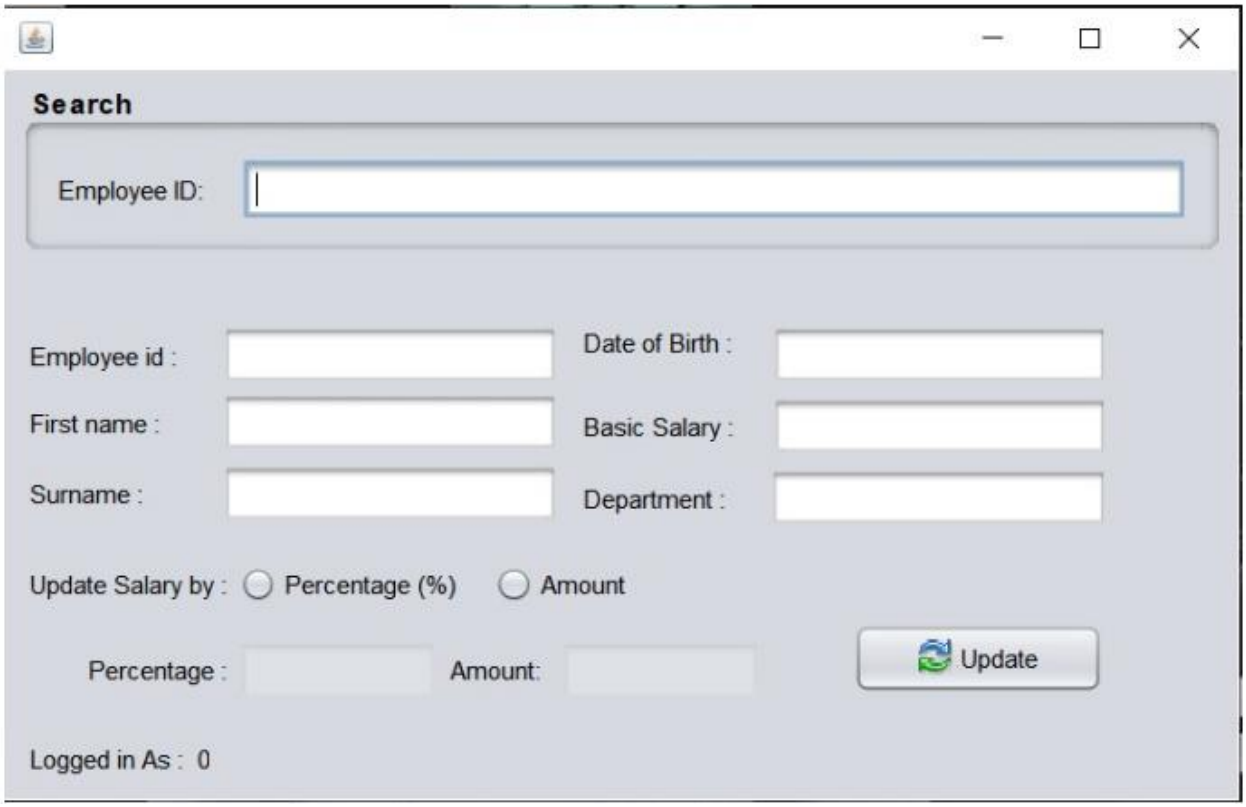
Search/Update Employee



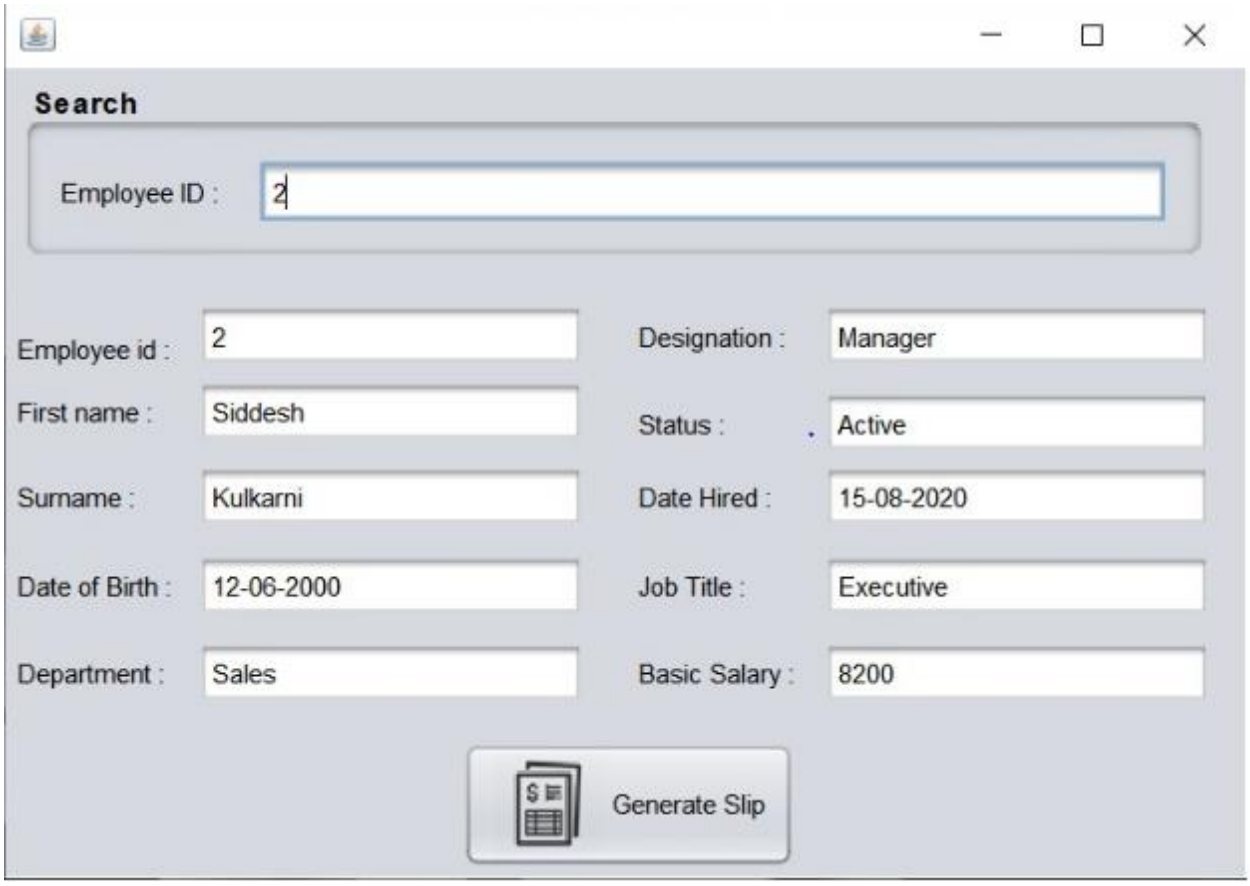
Deduction


Search
Employee ID : 2
Employee id 2
First name : Siddesh
Surname : Kulkarni
Date of Birth : 12-06-2000
Department : Sales
Designation : Manager
Status : Active
Date Hired : 15-08-2020
Job Title : Executive
Basic Salary : 8200
Update Salary by : Percentage (%) Amount
Percentage :
Amount: 320
Reason: Absence
Total Deduction: 320
Salary after deduction: 7880
Save
+ Calculate
Clear
Logged in As : 0

Update Salary



Payslip


Search
Employee ID :
2
Employee id :
2
First name :
Siddesh
Surname :
Kulkarni
Date of Birth :
12-06-2000
Department :
Sales
Designation :
Manager
Status :
Active
Date Hired :
15-08-2020
Job Title :
Executive
Basic Salary :
8200
Generate Slip

3.6 : Table Specifications

Table Name : **Staff_information**

Description: Used to store details of the employees.

SR NO	FIELD NAME	DATA TYPE	WIDTH	CONSTRAINT
1	id	Integer	10	Primary Key
2	first_name	Text	20	Not Null
3	surname	Text	20	Not Null
4	Dob	Integer	10	Not Null
5	Email	Varchar	20	Not Null
6	Telephone	Integer	10	Not Null
7	Address	Varchar	30	Not Null
8	Department	Varchar	20	Not Null
9	Image	Image		Not Null
10	Gender	Text	10	Not Null
11	Salary	Integer	10	Not Null
12	Address2	Varchar	30	Not Null
13	Apartment	Varchar	20	Not Null
14	Post_code	Integer	10	Not Null
15	Designation	Text	20	Not Null
16	Status	Text	20	Not Null
17	Date_hired	Integer	10	Not Null
18	job_title	Text	20	Not Null
19	basic_salary	Integer	10	Not Null

Table Name : **User**

Description: Login privileges to Admin.

SR NO	FIELD NAME	DATA TYPE	WIDTH	CONSTRAINT
20	emp_id	Integer	8	Primary Key
21	division	Varchar	20	Not Null
22	username	Varchar	20	Not Null
23	password	Varchar	20	Not Null

Table Name : **Deductions**

Description: Used to record and calculate Employee's deductions in salary.

SR NO	FIELD NAME	DATA TYPE	WIDTH	CONSTRAINT
24	id	Integer	10	Foreign Key
25	firstname	Text	20	Not Null
26	surname	Text	20	Not Null
27	salary	Integer	10	Not Null
28	deduction_amount	Integer	10	Not Null
29	deduction_reason	Integer	10	Not Null
30	emp_id	Integer	10	Foreign Key
31	made_by	Text	20	Not Null

Table Name : **Allowance**

Description: Used to record and calculate Employee's Allowances.

SR NO	FIELD NAME	DATA TYPE	WIDTH	CONSTRAINT
32	id	Integer	10	Foreign Key
33	overtime	Integer	10	Not Null
34	medical	Integer	10	Not Null
35	bonus	Integer	10	Not Null
36	other	Integer	10	Not Null
37	emp_id	Integer	10	Foreign Key
38	salary	Integer	10	Not Null
39	rate	Float	10	Not Null
40	total_allowance	Float	10	Not Null
41	first_name	Text	20	Not Null
42	surname	Text	20	Not Null
43	created_by	Text	20	Not Null

3.7 : Data Dictionary

SR NO	FIELD NAME	DATA TYPE	WIDTH	CONSTRAINTS	DATA DESCRIPTION	REFERENCE
1	id	Integer	10	Primary Key	User ID	Staff_information
2	first_name	Text	20	Not Null	First Name	Staff_information
3	surname	Text	20	Not Null	Last Name	Staff_information
4	Dob	Date & Time	10	Not Null	Date of Birth	Staff_information
5	Email	Varchar	20	Not Null	Email ID	Staff_information
6	Telephone	Integer	10	Not Null	Telephone Num	Staff_information
7	Address	Varchar	30	Not Null	Address Line1	Staff_information
8	Department	Varchar	20	Not Null	Department	Staff_information
9	Image	Image		Not Null	Emp Image	Staff_information
10	Gender	Text	10	Not Null	Gender	Staff_information
11	Salary	Integer	10	Not Null	Salary	Staff_information
12	Address2	Varchar	30	Not Null	Address Line2	Staff_information
13	Apartment	Varchar	20	Not Null	Apartment	Staff_information
14	Post_code	Integer	10	Not Null	Postal Code	Staff_information
15	Designation	Text	20	Not Null	Designation	Staff_information
16	Status	Text	20	Not Null	Status	Staff_information
17	Date_hired	Date & Time	10	Not Null	Hire Date	Staff_information
18	job_title	Text	20	Not Null	Job Title	Staff_information
19	basic_salary	Integer	10	Not Null	Basic Salary	Staff_information
20	emp_id	Integer	8	Primary Key	Emp ID	User
21	division	Varchar	20	Not Null	Division	User
22	username	Varchar	20	Not Null	Username	User
23	password	Varchar	20	Not Null	Password	User
24	id	Integer	10	Foreign Key	User ID	Deductions
25	firstname	Text	20	Not Null	First Name	Deductions
26	surname	Text	20	Not Null	Last Name	Deductions
27	salary	Integer	10	Not Null	Salary	Deductions
28	deduction_amount	Integer	10	Not Null	Deduction Amt	Deductions
29	deduction_reason	Integer	10	Not Null	Deduction Reason	Deductions
30	emp_id	Integer	10	Foreign Key	Emp ID	Deductions
31	made_by	Text	20	Not Null	Made By	Deductions
32	id	Integer	10	Foreign Key	User ID	Allowance
33	overtime	Integer	10	Not Null	Overtime Charges	Allowance
34	medical	Integer	10	Not Null	Medical Charges	Allowance
35	bonus	Integer	10	Not Null	Bonus	Allowance
36	other	Integer	10	Not Null	Other Charges	Allowance
37	emp_id	Integer	10	Foreign Key	Emp ID	Allowance
38	salary	Integer	10	Not Null	Salary	Allowance

39	rate	Float	10	Not Null	Rate	Allowance
40	total_allowance	Float	10	Not Null	Total Allowance	Allowance
41	first_name	Text	20	Not Null	First Name	Allowance
42	surname	Text	20	Not Null	Last Name	Allowance
43	created_by	Text	20	Not Null	Created By	Allowance

4: DRAWBACKS AND LIMITATIONS

Employee Payroll software, like any other IT system, can have certain weak points. Potential problems may arise around the issues such as:

- ✓ data security, loss or theft
- ✓ cyber security and fraud
- ✓ information access, quality and control

Other limitations with payroll software often arise around costs. Full featured software will generally be more expensive than manual payroll systems. It will also require computer equipment, resources and skilled operators. If you don't have these in-house, you will need to invest money into producing them.

5: PROPOSED ENHANCEMENTS

For small as well as large scale industries are coming more into action with it comes the effort to maintain employee details and generate their payslip. These industrial people have employees work on an hourly basis as per their project requirement.

Pocket Muster gives you a very easy way to calculate your employees salary based on the number of hours they have worked. It reduces paperwork as everything you won't have to write down the entry and exit time of an employee. Also saves you the hassle of sitting for hours to calculate an employee's salary.

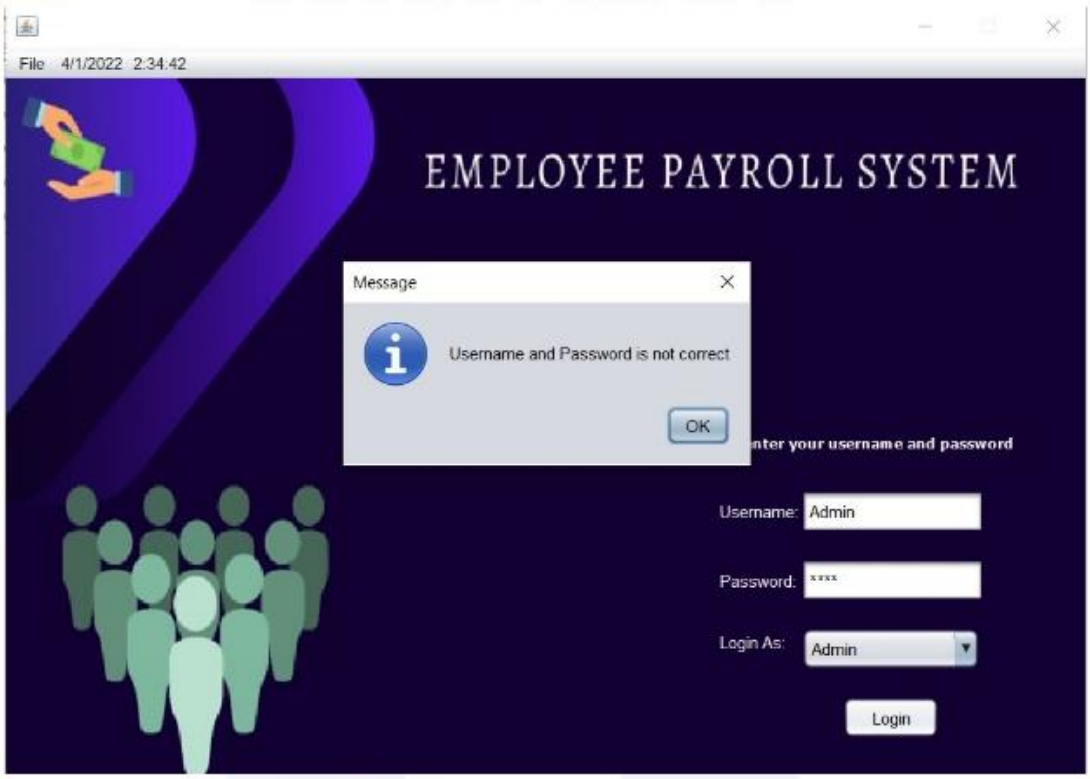
• We intend to add a leave structure in the future.

• We would like to implement a regular backup mechanism to back up the employee database to avoid disasters.

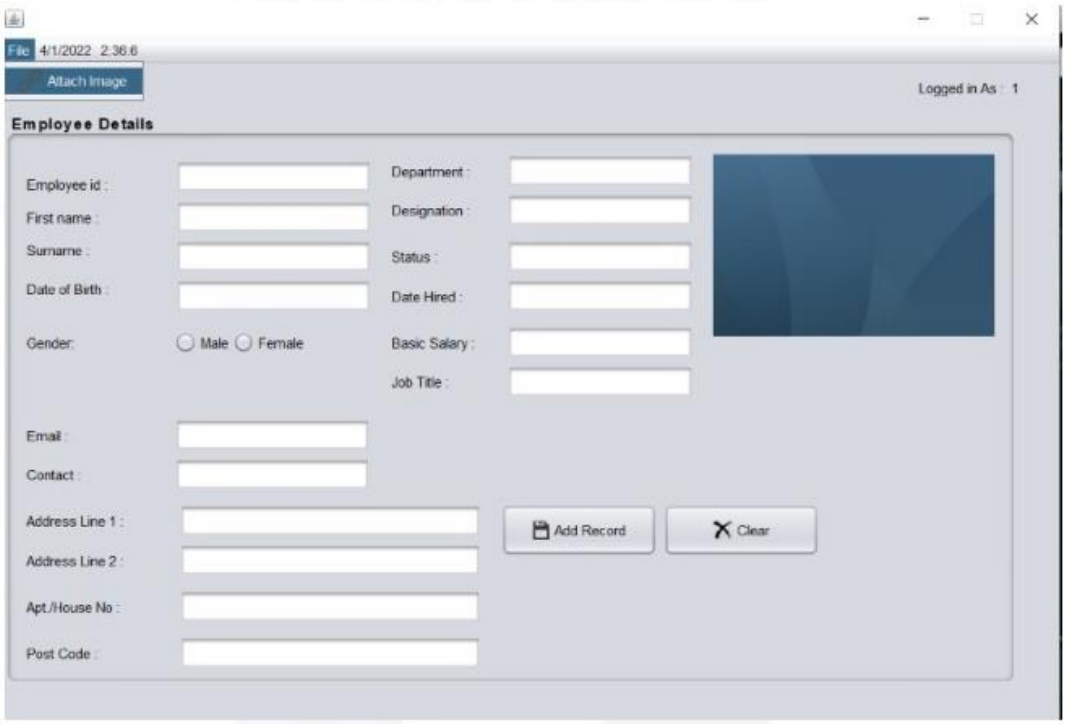
• The system can be developed in such a way that its existing features can be modified to better versions.

6: ANNEXURES

7.1 : Output reports



Invalid Credentials



Add emp > Attach Image

PAY SLIP

Tue Mar 08 01:09:49 IST 2022

EMPLOYEE DETAILS

Name of Employee: Siddesh Kulkarni
Designation: Manager
Department: Manager

SALARY

Basic Salary: $8600
Overtime: 1 Hours
Medical: $0
Bonus: $0
Other: $0

DEDUCTION

Deduction Details: Late
Total Deductions : $100

TOTAL PAYMENT

Total Earnings: 0.00
Net Pay : 8500.0

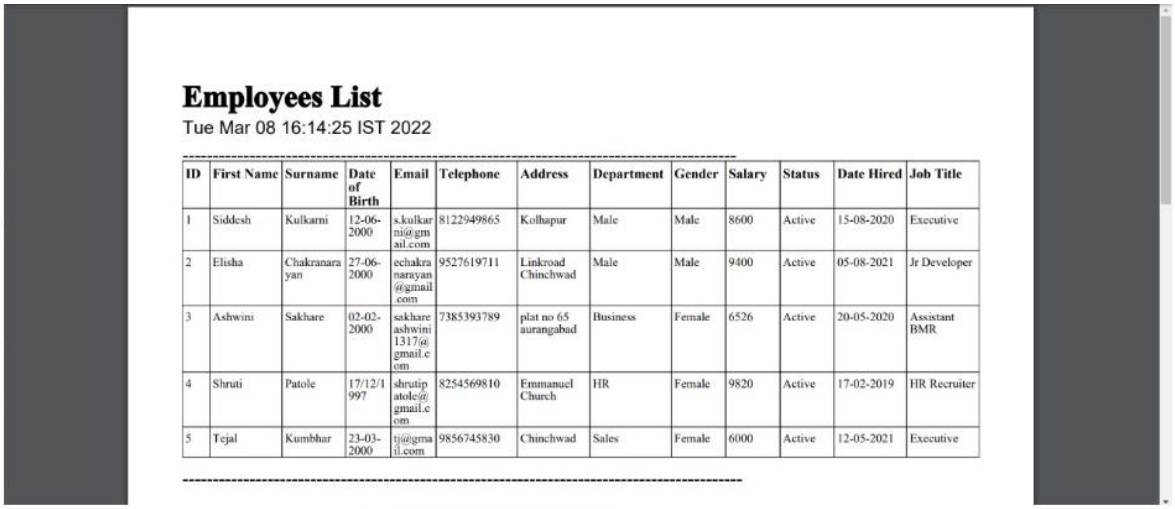
GeneratedSalarySlip

Employees Deduction List

Tue Mar 08 15:34:39 IST 2022

ID	First Name	Surname	Salary	Deduction Amount	Deduction Reason	Employee ID	Created By
6	Siddesh	Kulkarni	8200	100	Late	1	0
7	Ashwini	Sakhare	6426	180	Absence	3	1
8	Siddesh	Kulkarni	8600	60		1	1

Emp Deduction report



Employees List

Tue Mar 08 16:14:25 IST 2022

ID	First Name	Surname	Date of Birth	Email	Telephone	Address	Department	Gender	Salary	Status	Date Hired	Job Title
1	Siddesh	Kulkarni	12-06-2000	s.kulkarni@gmail.com	8122949865	Kolhapur	Male	Male	8600	Active	15-08-2020	Executive
2	Elisha	Chakranarayan	27-06-2000	echakranarayan@gmail.com	9527619711	Linkroad Chinchwad	Male	Male	9400	Active	05-08-2021	Jr Developer
3	Ashwini	Sakhare	02-02-2000	sakhareashwini1317@gmail.com	7385393789	plat no 65 aurangabad	Business	Female	6526	Active	20-05-2020	Assistant BMR
4	Shruti	Patole	17/12/1997	shrutipatole@gmail.com	8254569810	Emmanuel Church	HR	Female	9820	Active	17-02-2019	HR Recruiter
5	Tejal	Kumbhar	23-03-2000	tj@gmail.com	9856745830	Chinchwad	Sales	Female	6000	Active	12-05-2021	Executive

Emp_report

6.2 Sample program code

```
package employee.payroll.system;


import java.sql.*;
import javax.swing.*;
public class db {




   Connection conn=null;
   public static Connection java_db(){


      try{
         Class.forName("org.sqlite.JDBC");
         Connection conn =DriverManager.getConnection("jdbc:sqlite:\\EMP_21\\Employee Payroll System 2.0\\empnet.sqlite");
         //JOptionPane.showMessageDialog(null, "Connection to database is successful");


         return conn;



      }catch (Exception e){
         JOptionPane.showMessageDialog(null, e);
         return null;
      }
       }
}
```

7: CONCLUSION

The purpose of this system was to identify the gaps in the manual processing and maintaining the employee records.

Hence, we decided to builds this Employee Payroll System, which helps in collecting, maintaining, analysing, calculating and processing the employee records. This helps in reducing the manual work, also eliminates the risk of data loss, misinterpretation of data, any gaps, calculating the salaries.

The “Employee Payroll System” has been developed with due sincerity and diligence by following

standard development practices. The system delivered functionality as required by the

user satisfaction. The system has proved for the organization popularity between its

admin and employees. Also we can’t ignore the drawbacks and limitation of our system and in

future we will make the enhancement on the system. Altogether it was a great

experience, and we have learned a lot during system development.

8: BIBLIOGRAPHY

- ✓ www.w3schools.com
- ✓ www.tutorialspoint.com
- ✓ www.youtube.com
- ✓ https://www.javatpoint.com